Graduate Management Project (GMP):

A Strategic Marketing Plan for Women and Infant Services,

DeWitt Army Community Hospital and the DeWitt Health Care System

Fort Belvoir, Virginia

Kelly E. Soh

U.S. Army - Baylor University Graduate Program in Health Care Administration

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
01 APR 1999	**Final**	**Jul 1998 - Jul 1999**

4. TITLE AND SUBTITLE
A Strategic Marketing Plan for Women and Infant Services

5a. CONTRACT NUMBER
5b. GRANT NUMBER
5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)
Captain Kelly E. Soh, USA

5d. PROJECT NUMBER
5e. TASK NUMBER
5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
DeWitt Army Community Hospital 9501 Ferrel Road, Suite GC11 Fort Belvoir, VA 22060

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
US Army Medical Department Center and School Bldg 2841 MCCS-HRA (US Army-Baylor Program in HCA) 3151 Scott Road, Suite 1412 Fort Sam Houston, TX 78234-6135

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)
10-99

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release, distribution unlimited

13. SUPPLEMENTARY NOTES
The original document contains color images.

14. ABSTRACT
This market research paper analyzes DeWitt Army Community Hospital and the DeWitt Health Care System's Women and Infant Services from a marketing perspective, and ultimately proposes ten "action plans" for attracting and retaining more patients. Maternal/Child Health is DeWitt's second most important product line, with a target market of 25,000 female beneficiaries between the ages of 18 and 45. Currently, DeWitt has a 75 percent share of this market. The goal is to increase this market share to 85 percent. The "Women and Infant" product line consists of care provided in the Well Woman/OB/GYN Clinic, the Labor and Delivery Unit, and the Mother/Baby Unit. Expectant mothers spend approximately nine months as customers of this product line. DeWitt does not currently use product line management to integrate these services. Both secondary and primary data were used to gather information about the market. Primary data were collected using two survey instruments. One survey (the outpatient questionnaire) was mailed to beneficiaries who requested non-availability statements for obstetrical care from 1 January 1998 to 1 December 1998 (N = 254). The other survey (the inpatient questionnaire) was provided to patients who delivered babies at DeWitt during the month of January, 1999 (N=66). Outpatient responses indicated relatively low satisfaction with DeWitt's atmosphere, staff friendliness, appointment system, and wait times in the clinic. The inpatient questionnaire highlighted patients' concerns about the atmosphere, the facilities, and their likelihood to recommend to a friend. As a result of this study, ten recommended marketing action plans are identified. These include creating a "Women and Infant Services Center" on the hospital's third floor that is both functional and aesthetically pleasing to patients, appointing a product line manager to oversee the integration and marketing of Women and Infant services, and investing in a personallized "OB Registration" process for newly-pregnant patients.

15. SUBJECT TERMS **marketing, Women and Infant Services**					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**UU**	**48**	

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18

Acknowledgements

I gratefully acknowledge the assistance I received from the DeWitt staff in preparing this graduate management project. Specifically, the command group, COL James Martin, COL John Kugler, COL Roy Harris, and LTC Stephen Wilkinson were extremely supportive of this effort and generous with their time. I especially thank LTC Wilkinson for serving as my preceptor.

Ms. Susan Allen, DeWitt's Director of Marketing, not only had the original idea for this project, but also supported it from the beginning to the end. I learned so much from her -- she is a superb "marketer" and strategic planner. We will all miss her when she leaves DeWitt this summer.

I was fortunate to have a group of talented professionals who got together periodically to share their ideas with me. MAJ Mark Harrison, chief of OB/GYN; MAJ Nancy Steimer, chief of the Well-Woman Clinic; Ms. Deborah Stocker, clinical supervisor of OB/GYN; Ms. Betty Kerr, head nurse of Labor and Delivery; SSG Heidi Webber, NCOIC of Labor and Delivery; and Ms. Diane Fenlason, head nurse of the Mother/Baby Unit were all extremely helpful.

I appreciate the support I received from DeWitt's administrative areas, as well. Special thanks to the Managed Care Division, especially CPT Karen Plante, 1LT Karen Grogan, Ms. Madelin Edmonds, Ms. Freida Ridge, and Ms. Brenda Gaines for either tracking down information for me or letting me look through their files to find it. I thank CPT Kim Thompson and her staff in the Patient Administration Division for providing me with obscure data; and MAJ Sam Eden and the Resource Management Division staff, especially Mr. Phil Freeman and Ms. Heidi Hartmann, for always pointing me in the right direction. The Facilities Management Branch, headed by Mr. Lee Fletcher and Mr. Grant Stuart, patiently listened to my vision and educated me about the facility.

In addition to the staff at DeWitt, I thank my faculty reader, LTC Charles Wainright, for his guidance and comments, and the rest of the Army -- Baylor faculty for preparing me for this residency project. I also thank Ms. Ann Marie Muller, Program Analyst at the Naval Medical Logistics Command, for providing me with data and maps of our catchment area.

Finally, as always, I am indebted to my husband, Eugene, for his support and encouragement in everything I do.

Abstract

The simplest, most modest definition for marketing is "find out what people want and give them more of it" - Robert J. Gray

This market research paper analyzes DeWitt Army Community Hospital and the DeWitt Health Care System's Women and Infant Services from a marketing perspective, and ultimately proposes ten "action plans" for attracting and retaining more patients. Maternal/Child Health is DeWitt's second most important product line, with a target market of 25,000 female beneficiaries between the ages of 18 and 45. Currently, DeWitt has a 75 percent share of this market. The goal is to increase this market share to 85 percent.

The "Women and Infant" product line consists of care provided in the Well Woman/OB/GYN Clinic, the Labor and Delivery Unit, and the Mother/Baby Unit. Expectant mothers spend approximately nine months as customers of this product line. DeWitt does not currently use product line management to integrate these services.

Both secondary and primary data were used to gather information about the market. Primary data were collected using two survey instruments. One survey (the outpatient questionnaire) was mailed to beneficiaries who requested non-availability statements for obstetrical care from 1 January 1998 to 1 December 1998 (N = 254). The other survey (the inpatient questionnaire) was provided to patients who delivered babies at DeWitt during the month of January, 1999 (N=66). Outpatient responses indicated relatively low satisfaction with DeWitt's atmosphere, staff friendliness, appointment system, and wait times in the clinic. The inpatient questionnaire highlighted patients' concerns about the atmosphere, the facilities, and their likelihood to recommend to a friend.

As a result of this study, ten recommended marketing action plans are identified: (1) Create a "Women and Infant Services Center" on the hospital's third floor that is both functional and aesthetically pleasing to patients; (2) Appoint a product line manager to oversee the integration and marketing of Women and Infant services; (3) Invest in a personalized "OB registration" process for newly-pregnant patients; (4) Train every staff member involved in Women and Infant services on "consideration of others" and customer service; (5) Create two empanelment teams for OB patients, and manage patient expectations for continuity of care by encouraging them to see every provider on their team; (6) Offer outpatient OB services at the FHC of Woodbridge to accommodate that significant population of patients; (7) Advertise the above improvements to potential patients through direct mailings, brochures, and flyers inviting them to the grand opening of DeWitt's new center devoted to women and their infants; (8) Create additional access into this service line by expanding the Well Woman clinic to 40 hours per week; (9) Embark on a public relations campaign to alleviate suspicions that military health care is inferior to civilian care; and (10) Create a virtual tour of DeWitt's Women and Infant Service Center on the Internet.

Table of Contents

List of Tables

List of Figures

A Strategic Marketing Plan for Women and Infant Services

Introduction

In 1994, forward-thinking health care leaders created what is known today as the DeWitt Health Care System, an integrated delivery system consisting of a community hospital and several primary care clinics. The mission of the health care system is to provide beneficiaries ready access to the appropriate level of quality, comprehensive care; to provide primary and specialty care within the Walter Reed Health Care System partnership; to maintain and improve individual and collective readiness in support of national security objectives, and to support medical education and clinical research (DeWitt, 1998). The health care system's vision is to be the health care system of choice for Department of Defense (DoD) beneficiaries in Northern Virginia (DeWitt, 1998). There are approximately 135,000 DoD beneficiaries currently living in Northern Virginia, which is approximately one-third of the National Capital Area's eligible beneficiary population (DeWitt, 1998). The DeWitt Health Care System is truly the primary care base for the Walter Reed Health Care System, and also supports the local Navy and Air Force Medical Centers.

At the heart of this primary care base lies DeWitt Army Community Hospital, a 60-bed facility with five core services: primary care, maternal/child health, ambulatory surgery, behavioral health, and musculoskeletal medicine (DeWitt, 1998). Additionally, the hospital sponsors a 20-student family practice residency program with a three-year accreditation. In fiscal year 1998, the hospital's budget was $66.6 million, which decreased to $65.7 million in fiscal year 1999. DeWitt Army Community Hospital was constructed in 1957 and originally housed 200 inpatient beds.

In addition to the hospital, the DeWitt Health Care System consists of four "family health centers" located in strategic areas of Northern Virginia. The Family Health Centers (FHCs) of Woodbridge and Fairfax are run by a private contractor, PHP, and provide primary care to DeWitt beneficiaries. The FHC of Fort Myer, Andrew Rader Clinic, is a military treatment facility that provides primary and limited specialty care to beneficiaries living in the Fort Myer area. The FHC of Fort Belvoir is located inside the hospital on the first floor. Two other health clinics, one on the south end of the Fort Belvoir post and the other at Fort A.P. Hill, round out the DeWitt Health Care System.

Conditions Which Prompted the Study

On 1 June 1998, the military managed care program known as TRICARE was introduced into DeWitt Army Community Hospital and the DeWitt Health Care System (known hereafter as "DeWitt"). TRICARE is evidence that the military health system is adapting so that it may remain competitive with health care programs in the civilian sector (Roark, 1997). One of the main premises of the TRICARE program is increased patient choice. In order to convince patients to enroll in the least costly, health maintenance organization model of TRICARE (known as TRICARE Prime), DeWitt is embracing a marketing-driven approach to health care planning (Berkowitz, 1996). Marketing is the function of the organization that keeps in constant touch with the consumers, reads their needs, develops services to meet those needs, and communicates the organization's purpose (Roark, 1997).

One approach DeWitt uses to assess patient needs is by monitoring requests for nonavailability statements (NASs). Theoretically, beneficiaries who submit requests for NASs believe that their local military treatment facility cannot provide the care that they need or is located too far from their homes, and want permission to seek care with a civilian provider.

DeWitt's Director of Marketing, Ms. Susan Allen, noticed that requests for obstetrical/gynecological (OB/GYN) NASs were increasing, and attributed the increase to patient dissatisfaction with DeWitt's OB/GYN clinic. She is concerned that if patients are indeed dissatisfied with the clinic, they will do one of two things: (1) refuse to enroll in TRICARE Prime, or (2) enroll with DeWitt but choose to receive their obstetrical care at another TRICARE site in the region. Under the first scenario, DeWitt will not be funded for those beneficiaries under enrollment-based capitation (EBC). Under the second scenario, DeWitt will have to reimburse the other facility for that specialty care.

Another by-product of TRICARE is increased competition between the different branches of the armed services. One of DeWitt's most important services is labor and delivery -- approximately 1000 babies are delivered annually (DeWitt, 1998). However, the National Naval Medical Center in Bethesda (known hereafter as "Bethesda") also provides labor and delivery services, and recently began an intensive promotional campaign to attract expectant mothers (Allen, 1998).

The combination of the above issues led to an increased interest in how DeWitt provides Women and Infant patient care. With future funding being tied to TRICARE Prime enrollment, it is imperative that key services attract and retain patients. Under EBC, hospitals receive capitated funding for TRICARE Prime enrollees. Capturing patients enrolled to other sites, such as the health clinic at Quantico Marine Base, is important because Quantico will eventually reimburse DeWitt for services.

Clearly, marketing to women is essential. Studies show that women are the primary health care decision-makers for American families. For example, women are four times more likely than men to select a health care provider for treatment of a child; women select

physicians for their own care 80 percent of the time, while men choose their own doctors 56 percent of the time; and women select a hospital six out of ten times (Dearing, Gordon, Sohner, and Weidel, 1987). Women who are satisfied with the routine gynecological care they receive at DeWitt will probably choose DeWitt for their obstetrical care, childbirth, and follow-up care (Dearing, et al., 1987). DeWitt's leadership supports the analysis and development of a marketing plan directed at this population to ensure the organization's future financial viability.

It is important to note that, currently, there is no "Women and Infant care" service line at DeWitt. Women and Infant care is actually provided in several areas: the Family Health Centers, the Well-Woman/ OB/GYN clinic, the Labor and Delivery Unit, and the Mother/Baby Unit. The Well-Woman Clinic, a three-year old initiative, is apparently very well received by patients (Allen, 1998). Results of a recent patient satisfaction survey indicate that 99 percent of patients were either "satisfied" or "very satisfied" with the care they received at the clinic (Steimer, 1998). The well-woman clinic is open three evenings a week from 5:00 p.m. - 9:00 p.m. and Saturdays from 9:00 a.m. to 5:00 a.m. It occupies the same physical space as the OB/GYN clinic and handles routine gynecological services (papanicolaou smears, mammograms, and other routine procedures) that female patients do not receive from their primary care providers. The OB/GYN clinic handles complicated gynecological cases (primarily surgical) and obstetric patients. The general belief, although not fully documented, among DeWitt staff members is that the OB/GYN clinic is inefficient and patients are dissatisfied with their care (Allen, 1998). Currently, there are no formal studies to back up this belief.

While the well-woman/OB/GYN clinic is located on the first floor of the hospital, the labor and delivery and mother/baby units are located on the third floor of the hospital. DeWitt has one-person labor/deliver/recovery (LDR) rooms and four-person mother/baby post-partum

rooms. There is general agreement among the staff that the four-bed post-partum rooms are less than ideal for new mothers trying to recuperate after delivering their babies. Additionally, there appears to be a disconnect, at least in terms of location, between obstetrical care and actual labor and delivery. This could possibly be remedied by moving the well-woman/OB/GYN clinic to the third floor.

Statement of the Problem or Question

Given that TRICARE increases DeWitt's competition for patients, the following question is posed: What are the discernable aspects of Women and Infant care that the DeWitt Health Care System can improve, in terms of product, price, place, and promotion, in order to attract and retain enough patients to ensure financial viability under enrollment-based capitation?

Literature Review

Military health system leaders usually equate marketing with sales and/or advertising. The following delineation between sales and marketing is provided by Theodore Levitt: Selling tries to get the customer to want what the company has, while marketing tries to get the company to have what the customer wants (Dearing, et. al, 1987). In other words, better OB/GYN brochures are not going to stop patients from requesting NASs -- providing better service will. The literature supports the notion that marketing Women and Infant services is crucial for organizational success in health care.

In their book, Marketing Women's Health Care, Dearing et al. point out that 58 percent of pregnant women choose a hospital first, and a physician second, for maternity care. They also emphasize the fact that the average pregnant woman calls or visits three hospitals before selecting where she will deliver, and 88 percent of women are willing to drive 30 minutes for their OB/GYN care (1987). While managed care organizations may limit this choice, these facts

are important to this study because DeWitt's TRICARE Prime patients may choose other TRICARE sites in the region for their OB/GYN care (Plante, 1998).

The civilian health care sector is responding to increased competition and service differentiation, as well. Clearly, maternity units are facing some of the toughest competition in today's health care marketplace (Reid, 1996). Entrepreneurs like Rina Spence are tapping into the women's health care market with full-service ambulatory care centers staffed exclusively by women (Appleby, 1997a). Spence believes that the female market wants quality, convenience and some comfort -- which can be anything from friendly receptionists to physicians who take the time to listen to patients (Appleby, 1997a). Some hospitals, such as Silicon Valley's El Camino, are constructing maternal-child health buildings and offering creative services like electronic mail baby announcements (Appleby, 1997b). Fairfax Hospital, 16 miles from DeWitt, offers a virtual tour of its Labor and Delivery Suites on the Internet, and boasts such amenities as private bathrooms, a coffee bar, and gleaming, brand-new furniture and equipment (Inova, 1999).

Other organizations react to managed care constraints by focusing on OB/GYN quality improvement initiatives. For example, York Hospital in Pennsylvania initiated a program to control costs and improve outcomes through clinical pathways (Simon, Heaps, and Chodroff, 1997). Differences in outcomes and patient satisfaction with respect to lengths of stay have also been studied. One study found that patient satisfaction with obstetric care may not depend on the absolute duration of the stay, but whether or not they perceive it to be adequate (Finkelstein, Harber, and Rosenthal, 1998). It appears that managed care and increased patient satisfaction do not have to be mutually exclusive.

In the 1980s, hospitals began creating labor/delivery/recovery (LDR) and labor/delivery/recovery/postpartum (LDRP) units. The difference between the two is that when a woman delivers in a LDR, she and the baby are moved to another location for post-partum care, but if she delivers in a LDRP, she and the baby stay in that room for the duration of their hospitalization. The driving force behind the creation of LDRPs was the convenience and comfort of the mother (Koska, 1988). While there is virtually no difference in the philosophy behind LDRs and LDRPs, hospitals that provide LDRPs must commit significantly more floor space (300 square feet per LDRP) and staff orientation/education (Koska, 1998).

Regardless of whether an organization provides LDRPs or LDRs, most care for the mother and baby occurs in the same room during the post-partum period. This “mother/baby” approach is designed to offer immediate post-partum benefits to the mother, her infant, and the health care providers (Phillips, 1998). Mother/baby care offers a link between quality of care and cost containment by streamlining nursing care, emphasizing prevention, and teaching health promotion (Phillips, 1998). Advocates of this type of nursing care also believe that it increases patient satisfaction and the “bonding” between mother and infant (Phillips, 1998). Today, approximately 60 percent of obstetrics units in this country provide some sort of "couplet care" for the mother and baby, and another 30 percent are in the process of reorganizing to do so (Bajo, Hagler, and Smith, 1998).

Midwives are playing a more active role in the care of pregnant women today. Since 1975, the number of births attended by midwives has increased eight-fold (Mander, 1997). Recently “birth centers” have entered the health care marketplace as an alternative to hospital-based deliveries. These centers provide diagnosis and treatment to low-risk mothers during

pregnancy, labor, and delivery who require less than a 24-hour stay (Stone and Walker, 1995). Championed by midwives for four decades, these freestanding birth centers provide cost-effective maternal and infant care (Ernst, 1996). Currently the military health system does not include any birth centers. In February, 1997, the Coalition for Improving Maternity Services (CIMS) issued its "Mother-Friendly Childbirth Initiative," which set guidelines for improving birth outcomes while reducing costs (CIMS, 1997). These include the following: access to professional midwifery care; linkage with appropriate community resources, including breastfeeding support; culturally competent care; and staff education on non-drug methods of pain relief (CMIS, 1997).

An interesting controversy surrounding OB/GYN services concerns its classification as "specialty" care. The TRICARE support contract allows OB/GYN providers to serve as primary care managers (MCSC, 1998). In today's managed care market, primary care physicians are extremely important and powerful (Johns, 1994). Historically, women unconstrained by managed care guidelines used OB/GYN physicians extensively for primary care (Johns, 1994). However, at DeWitt, female beneficiaries are not currently being given the option of enrolling with an OB/GYN primary care manager.

Finally, a 1994 study conducted by DeWitt's managed care department clearly showed that DeWitt provides more cost-effective deliveries than its local civilian counterparts. In 1994 dollars, the cost of a normal vaginal delivery at DeWitt is approximately $3600, while the average cost at a local civilian facility is $4200 (Mustelier, 1994).

Purpose

The purpose of this graduate management project is to use a marketing-oriented methodology to analyze what DeWitt's patients expect in terms of Women and Infant services,

compare it to what DeWitt currently provides, and develop a marketing plan for attracting and retaining future patients.

The “service” aspect of care includes the following variables: the technology employed in delivering care, the facilities in which care is provided, the personnel providing the care, and the systems used to deliver the health care (Roark, 1997). Services are intangible activities or processes offered to customers (Berkowitz, 1996). Services marketing is difficult, and requires marketers to recognize the "five I" characteristics of services: intangibility, inconsistency, inseparability, inventory, and interaction (Berkowitz, 1996). “Place,” in this study, equates to access of care in terms of geographic availability of services. “Price” refers to both out-of-pocket and "time" costs to the patient in terms of travel times and wait times in the clinic. Finally, “promotion” variables include advertising, personal selling, and public relations (Berkowitz, 1996).

Methods and Procedures

This market research effort focuses on the following areas: a qualitative and quantitative analysis of the market, a trend analysis, a summary of the competition, and an analysis of the service’s problems and opportunities (Berkowitz, 1996). From these results, goals and objectives were established and marketing action plans formed, in accordance with the “four Ps” of marketing (Berkowitz, 1996).

Secondary data sources provide information about the market and current trends in OB/GYN services. The following questions were explored: How many female beneficiaries of childbearing age reside within DeWitt’s catchment area? How is the civilian sector delivering Women and Infant services? How are other military treatment facilities providing these services?

The analysis of DeWitt's Women and Infant service line's problems and opportunities was accomplished using primary data. The primary data were collected from two sources: beneficiaries who requested NASs (Appendix A) and patients who delivered babies at DeWitt (Appendix B). Appendix A was mailed to beneficiaries and Appendix B was made available to post-partum patients in the mother/baby unit. The purpose of the first survey was to determine why patients do not want to use DeWitt's OB/GYN services. The purpose of the second survey was to find out how the labor and delivery and mother/baby services can be improved. Patient responses are coded and entered into two software packages, SPSS and Microsoft Excel. Descriptive statistics provide information about the data, as discussed in the "results" section.

Content validity of both survey instruments was verified using a panel of persons to judge how well the instruments measure what they are designed to measure (Cooper and Emory, 1995). This expert panel consisted of the Deputy Commander for Nursing, the clinical supervisor of the OB/GYN clinic, the Director of Marketing, and the Head Nurses of the labor and delivery and mother/baby units. Reliability of the two instruments was measured using Cronbach's Alpha (Cooper and Emory, 1995). Cronbach's Alpha is a measure of internal consistency, and is generally used for measures where subjects respond to questions on a scale. Alpha can range between 0 and 1. If a scale has an alpha above .60, it is usually considered to be internally consistent (Mitchell, 1999). The reliability coefficient for the outpatient survey (Appendix A) is .80, and for the inpatient survey (Appendix B) is .78.

The objectives and goals for the Women and Infant Service were developed by the ad-hoc committee consisting of this author, the Deputy Commander for Nursing, the Director of Marketing, the Chief of OB/GYN Services, and the head nurses of the OB/GYN Clinic and Mother/Baby Unit.

Finally, action plans were formulated using marketing's "four Ps": product, place, price, and promotion.

Results of Market Research

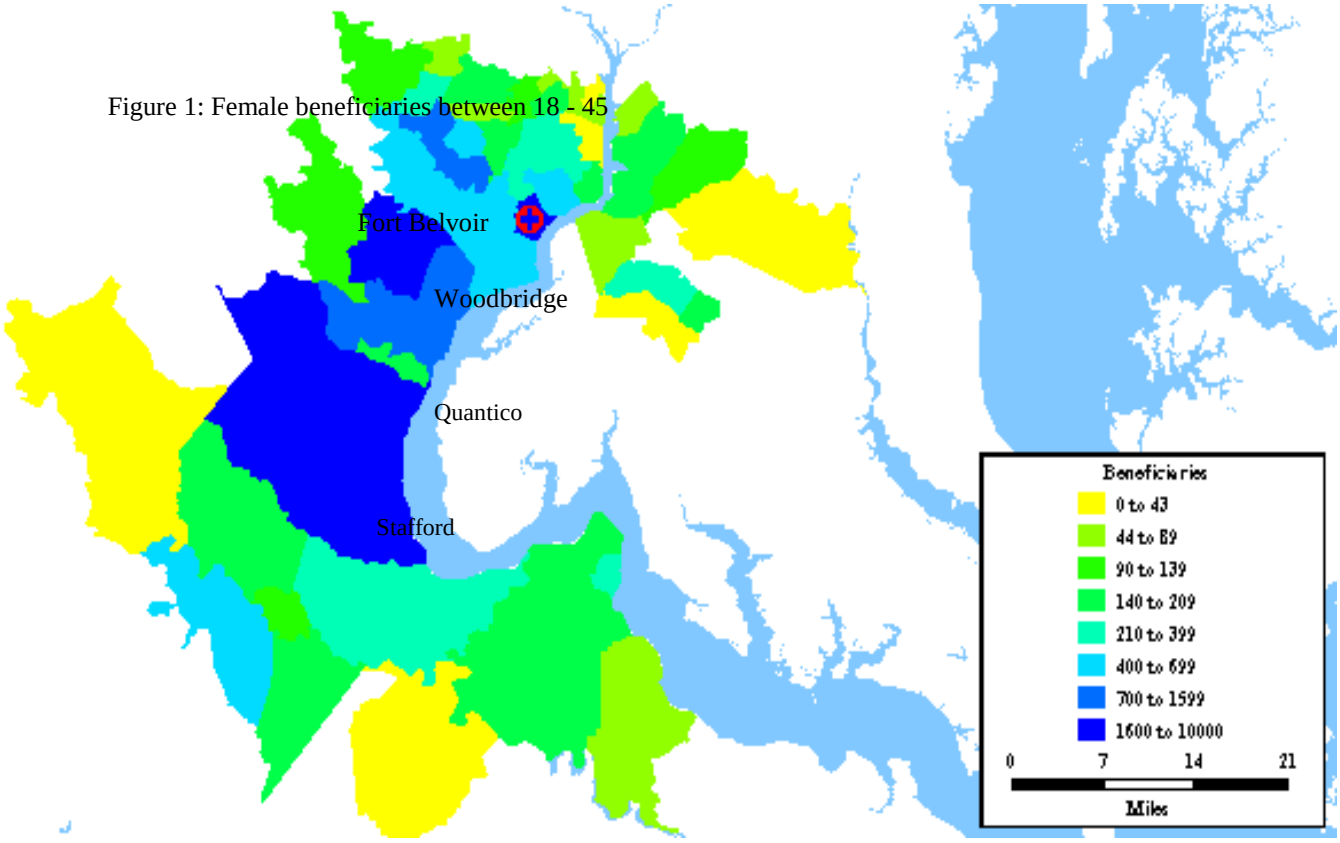
Results of this research effort are organized into two sections: results of secondary research and results of primary research.

Secondary Research

DeWitt's target population for Women and Infant services is female beneficiaries between the ages of 18 and 45 who reside within a 40-mile/60-minute drive of the hospital. This area around the hospital is known as its "catchment area." The mileage/driving distance standard was established in the Managed Care Support Contract (MCSC) as the access standard for specialty care. OB/GYN services are considered specialty care under the MCSC.

Approximately 25,000 female beneficiaries between the ages of 18 and 45 reside in DeWitt's catchment area (DMIS, 1999). See Figure 1 below.

Figure 1: Female beneficiaries between 18 - 45



Of the 25,000 women in this target market, only eight percent of them live on Fort Belvoir (DMIS, 1999). The highest concentration (26 percent) of potential patients lives in the Woodbridge area, six miles south of Fort Belvoir. The Family Health Center of Woodbridge is not currently providing outpatient OB care.

DeWitt's share of the market is relatively low. In Fiscal Year 1998, DeWitt received 350 NAS requests for OB/GYN care. Of those, 341 were approved and nine were denied (Patient Liaison Office, 1998). Twenty-six beneficiaries who requested NASs lived outside DeWitt's catchment area, so those individuals are not considered part of the target market. DeWitt allowed the remaining 315 women to see civilian providers at government expense. Of the 907 babies born at DeWitt in FY 1998, four were multiple births and there were no civilian emergency deliveries. Thus, 903 DeWitt patients delivered babies in the facility's labor and delivery unit. The Chief of OB/GYN stated that the number of patients he referred to Bethesda for care was negligible (Harrison, 1998). Using these numbers, it appears that DeWitt's share of the military beneficiary market is 75 percent.

In the month of September, four months after TRICARE began, 75 percent of the patients who delivered at DeWitt were TRICARE Prime enrolled patients. Under enrollment-based capitation (EBC), which is expected to begin in Fiscal Year 2000, DeWitt will receive funding for each patient enrolled in TRICARE Prime. Likewise, the organization will have to pay for services delivered to TRICARE Prime patients by network providers. While DeWitt will not receive EBC funds for non-enrolled patients, maximizing military treatment facility (MTF) utilization saves money for the TRICARE region.

The number of babies DeWitt has delivered in the past five years has decreased slightly (see Table 1 below).

Table 1: Deliveries at DeWitt Army Community Hospital

Fiscal Year	Number of Deliveries
1995	1,112
1996	1,021
1997	1,073
1998	907

Source: DeWitt Significant Actions Report

However, the national birthrate has declined over the past several years, as well. In 1990, there were 16.7 births per 1000 women, and by 1996 that number had fallen to 14.8 (U.S. Census Bureau, 1998).

The number NASs requested has fluctuated over the past few years (see Table 2 below).

Table 2: NAS Requests processed by DeWitt Army Community Hospital

Fiscal Year	Number of NAS Requests
1995	274
1996	409
1997	304
1998	350

Source: DeWitt Patient Liaison Office

Figure 2, below, graphically depicts the above tables. A correlation coefficient of -.56 is found when the data is arrayed, indicating an inverse relationship between the number of

deliveries at DeWitt and the number of NASs processed (Sanders, 1995). As NASs increase, deliveries decrease.

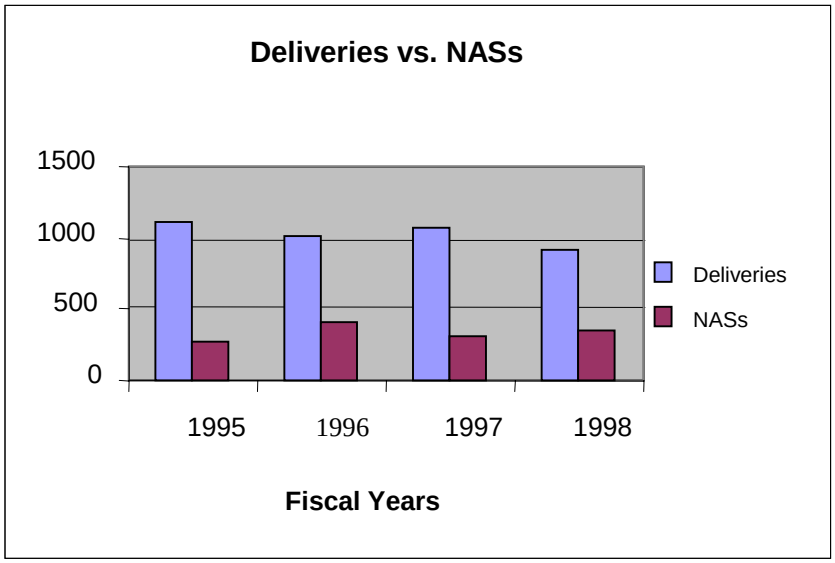


Figure 2: Deliveries vs. NASs

By the year 2004, the number of female beneficiaries of childbearing age who live within DeWitt's catchment area is expected to decrease by 12% to 20,000 (Tobey + Davis, 1998). This is significant because DeWitt will be competing for fewer and fewer patients each year.

DeWitt's competition can be grouped into two categories: civilian health care organizations and other MTFs. A 1994 study of patient satisfaction revealed that military beneficiaries prefer civilian medical care to care provided in MTFs (Mangelsdorff, 1994).

Sierra Military Health Services, the TRICARE contractor for Region 1, has agreements with nine civilian hospitals in Northern Virginia to provide discounted services to military beneficiaries. Additionally, some patients choose Fairfax Hospital, an authorized out-of-network facility. From 1 June 1998 to 1 December 1998, 13 of DeWitt's TRICARE Prime patients used network providers for outpatient and inpatient OB care, at a total cost of $8,530

(RMD, 1999). Once DeWitt issues NASs for non-Prime patients, the organization loses visibility of where those patients are cared for and how much it costs.

Potomac Hospital, located in Woodbridge, Virginia, has LDR rooms and both private and semi-private mother/baby rooms. Patients are charged an additional fee for a private room. All rooms have bathrooms attached to them.

Figure 3: A Mother/Baby room at Potomac Hospital
Source: Potomac, 1999

In May 1998, Bethesda opened its newly renovated Maternal/Infant Care Center (MICC), an $8.5 million unit consisting of 23 labor/delivery/recovery/post-partum (LDRP) beds and nine anti-partum beds (Whitcomb, 1998). The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) surveyors told Bethesda's staff that their MICC unit was the best one they had ever seen (Whitcomb, 1998). The patient rooms are very large and tastefully decorated with hardwood floors, oak furniture to hide instruments and equipment, and soothing colors. Each room has a large private bath, complete with an oversize bathtub/shower. Bethesda delivers an average of 160 babies a month, and the staff has observed a nine percent increase in their workload since the renovation project was completed (Whitcomb, 1998). Their hunch is that patients who normally receive their care at other facilities are hearing about the MICC and choosing to deliver at Bethesda (Whitcomb, 1998).

Figure 4: One of Bethesda's LDRPs
Source: Bethesda, 1998

Besides a beautiful, state-of-the-art MICC, Bethesda provides reproductive services and has a 24-bed neonatal intensive care unit (NICU). These services ensure continuity of care for patients both before conception and after birth, should they experience any difficulties. Bethesda specializes in high-risk pregnancies, especially those involving multiple births. Clearly, maternal/infant services is a key product line at Bethesda: 45 percent of the hospital's beds are LDRPs (Whitcomb, 1998). It is not surprising that the leadership is aggressively advertising their MICC (see Figure 4).

A MICC marketing committee meets monthly to discuss patient-centered initiatives such as offering new parents the opportunity to send their baby's picture out over the Internet, improving the MICC web site, offering 24-hour visitation, and improving the security of the unit (Whitcomb, 1998). DeWitt's patients are free to choose Bethesda physicians for their OB care and Bethesda's MICC as their birthing site, as long as they are willing to drive up to an hour and a half to get there.

Primary Research

Organizations use exploratory research to determine the cause of the problem (Berkowitz, 1996). Patients identified both problems and opportunities in DeWitt's Women and Infant services by responding to the questionnaires detailed in the "methods and procedures" section. Results are summarized below.

The outpatient questionnaire (Appendix A) was sent to beneficiaries who requested NASs from 1 January 1998 to 1 December 1998 (N = 254). Sixty-four surveys were returned, for a response rate of 24 percent. Of the 64 beneficiaries who responded, only 25 of them (38 percent) had ever received OB/GYN care at DeWitt. Of those 25 patients, 56 percent had received care at the OB/GYN clinic, 12 percent and the well-woman clinic, and 20 percent at the

family health center (some respondents had been to more than one clinic, and some did not circle a response). Those 25 respondents answered questions #3 through #9 regarding care at those sites. They responded to Likert scale questions, with 5 being "strongly agree" and 1 being "strongly disagree. The mean responses are detailed in Table 3 below.

Table 3: Mean responses to outpatient Likert scale questions

Question		**Mean Response**
"The atmosphere (decor, etc.) of the clinic is very pleasing"	2.88	
"The clinic staff is very friendly and made me feel comfortable"		2.96
"The clinic staff respected my privacy"		3.54
"My waiting time in the clinic was reasonable"		3.17
"It was easy to get an appointment at the clinic"		2.96
"The clinic is open during hours that are convenient for me"	3.39	
"There were sufficient educational materials available at the clinic"		3.50
Overall mean response		**3.20**

Areas below the overall mean are atmosphere, friendliness of the staff, waiting times, and ease of getting an appointment.

All 64 respondents answered questions #10 and #11. The question, "I requested a non-availability statement to use another facility's *pre-natal* service because (circle all that apply)" yielded the following responses:

Table 4: Summary of pre-natal criteria

Convenience:	61%
Reputation:	36%
Recommendation from others:	32%
Have trusted civilian physician:	39%
Atmosphere:	33%
Other:	45%

To the question, "My decision to request another facility for the *birth of my child* was based on (please circle all that apply)" patients indicated the following:

Table 5: Summary of childbirth criteria

Convenience:	53%
Reputation:	39%
Recommendation from Others:	33%
Atmosphere:	36%
Other:	64%

Of note, 111 of the 256 beneficiaries reside in zip codes that DeWitt's Managed Care Division recognizes as being within the catchment area but too far for patients to drive. This means that 43 percent of the population surveyed had a legitimate reason -- distance -- for requesting NASs. However, these beneficiaries are not automatically granted a NAS, and patients living in those zip codes are free to choose DeWitt for their OB care.

The second questionnaire provided to patients was the inpatient questionnaire (Appendix B) available in the mother/baby unit from 1 January 1999 to 31 January 1999. Sixty-six patients delivered babies at DeWitt that month. Thirty patients completed the survey, for a response rate of 45 percent. Overall, the results of the survey were very positive. Mean scores for the questions are detailed below in Table 6. Questions were on a Likert scale, with 5 being "strongly agree" and 1 "strongly disagree."

Table 6: Mean Responses to inpatient Likert scale questions

Question:	**Mean Response**
"I am pleased with the medical care I received in the labor and delivery unit."	4.90
"I am very pleased with the care I received in the mother/baby unit."	4.73
"The hospital staff is friendly and made me, and my family, feel comfortable."	4.80
"The hospital staff respected my privacy."	4.87
"The facilities (my room, the bathroom) adequately met my needs"	4.17
"The atmosphere (decor, etc.) of the ward was very pleasing"	4.27
"I was cared for by the same physician or team of physicians throughout my pregnancy"	4.03
I would definitely recommend DeWitt to a friend who is expecting a baby."	4.43
Overall mean response:	**4.52**

Four areas, facilities, atmosphere, continuity of care, and willingness to recommend DeWitt to a friend, received a score below the overall mean.

The next question on the inpatient questionnaire was "The reason I chose to deliver my baby at DeWitt is (circle the most appropriate response)." Responses are summarized below. Some patients circled more than one response.

Table 7: Summary of DeWitt inpatient responses

Its Location	77%
Its Facilities	7%
The Staff	13%
I felt I had no choice	13%
Other	10%

Clearly, DeWitt is conveniently located for patients, but not many based their decision on the basis of its physical facilities. The last question was, "If I had to make a decision right now on where I would deliver my next child, I would choose:"

Table 8: Summary of hospital preference responses

DeWitt Army Community Hospital	80%
National Naval Medical Center (Bethesda)	13%
Local Civilian Hospital	3%

These responses indicate that DeWitt satisfied eight out of ten patients, and Bethesda is more of a threat than the civilian competition.

Discussion

From the above research, a "strengths, weaknesses, opportunities, and threats" (SWOT) analysis is presented for this service line. Identifying an organization's internal strengths and

weaknesses is an essential task (Ginter, Swayne, and Duncan, 1998), and DeWitt has several of each.

SWOT Analysis

Strengths

DeWitt's greatest strength within its loosely defined Women and Infant service line is the well-woman clinic. A 1998 questionnaire administered by the clinic director showed that 99 percent of patients were either “satisfied” or “very satisfied” with the care they received at the clinic (Steimer, 1998). Begun as an enhanced benefit for TRICARE Prime enrollees, the well woman clinic is so popular that appointments are filled 30 days in advance. These circumstances present an opportunity that is discussed later.

Another strength is the credentials of DeWitt's providers. DeWitt has six OB/GYN physicians: three are board certified; two are young physicians who are preparing to take their boards; and one is a 30-year veteran of Army medicine who began practicing before board certification was an issue. This latter physician has delivered almost 4,000 babies and serves as the chief of the Department of Surgery. The physicians handle complicated GYN, surgeries, and also provide 24-hour in-house call. Certified Nurse Midwives (CNMs) care for routine GYN and OB patients. These providers all have masters degrees, registered nursing licenses, and other credentials outlined in Army regulation 40-68, Quality Assurance Administration.

DeWitt is fortunate to have a Family Practice Residency, as well. Residents and medical students provide additional help to the staff, especially on the labor and delivery ward. They also help inspire a philosophy of continuous learning, which benefits both staff and patients.

DeWitt's OB medical records system is another one of its strengths. OB/GYN patient records are maintained in the clinic throughout the course of their pregnancy. When the clinic closes in the evening, the staff wheels the records up to labor and delivery. This process gives the attending physician access to the patient's history if she is admitted at night.

Finally, DeWitt's catchment area has a significant military beneficiary population. The questionnaire results highlight the fact that convenience is very important to pregnant patients. DeWitt is more convenient than Bethesda for this large group of patients.

Weaknesses

DeWitt's physical facility is its most significant barrier to effective marketing. DeWitt Army Community Hospital was built in 1957 to house 200 inpatients. Health care delivery has changed dramatically since then, and DeWitt now provides 60 inpatient beds and a wide variety of outpatient care. The configuration of these outpatient clinics is less than ideal -- they have been forced into long, narrow corridors that used to be wards. The OB/GYN clinic is tucked away in a corner of the first floor of the hospital and consists of narrow hallways with small exam rooms on both sides. Patients wait for their providers in hallway chairs. The décor is very stark, consisting of institutional-looking floor tiles and yellowish walls. The labor and delivery and mother/baby units are co-located on the L-shaped third floor of the hospital. The LDRs are adequate in terms of space, but the floors and walls are a depressing bluish-gray color. There is a distinctive “institutional” ambience on the labor deck. The mother/baby ward is inadequate in terms of current JCAHO space guidelines (Tobey + Davis, 1998). Each four-bed (four mothers and four babies) room is only 345 square feet. Patient privacy is achieved by using a curtain to separate each mother/baby area. There are no bathrooms in the rooms -- patients must use the common one in the hallway (see Figure 4).

Figure 4: The common bathroom in DeWitt's Mother/Baby Unit.

Patients provided some colorful comments regarding DeWitt's physical facility on both the outpatient and inpatient questionnaire. Some of these are listed below:

"I'm sure, because DeWitt is an older facility, it has always appeared dark and dingy."

"Post-partum care was highly unacceptable. Four people in a room with rooming-in infants is INSANE."

"I also liked the idea [of delivering at a civilian facility] of having a private room to get acquainted with my newborn and for better rest."

"I've heard that post-partum is not a nice place to be – too crowded and not very much personal care from the nurses."

"I preferred the atmosphere of the civilian hospital."

"Don't put so many people in one room!"

"Put more than one sink in the rooms with 4 beds."

"Provide, as a minimum, shared bathrooms between no more than 2 rooms."

"Need more space in the rooms. Could hardly move around."

"Put bathrooms in the rooms – it was difficult to frequently walk down to the bathroom, take the baby to the nursery, especially for breastfeeding moms who are feeding more frequently."

Another obstacle DeWitt faces in marketing this service line is the perception among patients that military health care is simply inferior to civilian care (Mangelsdorff, 1994). This theme was reinforced on the questionnaires and NAS requests. Patients seem to think that maternity care is too important to entrust to the military health system. A particularly

opinionated patient who responded to the questionnaire telephonically said, "What does the Army know about running hospitals? The Army knows things like Infantry operations, but you need doctors and nurses to be in charge of hospitals." Clearly, placing the words "Army" and "hospital" next to each other conjures up interesting patient perceptions.

Another weakness within DeWitt's Women and Infant service line is the perceived lack of continuity of care. In the "comments" section of the outpatient survey, 36 percent of the patients indicated their desire to see the same physician throughout their pregnancy, and did not feel that DeWitt could provide them with that service. Unfortunately, they are correct. The OB/GYN clinic does not have a team structure, whereby patients become familiar with three or four providers, knowing that one of them will be on call to deliver their baby. The Chief of OB/GYN does not believe he has the staff to support this (Harrison, 1998).

DeWitt's OB registration process is a weakness within this service line. When a woman thinks she may be pregnant, she walks into the OB/GYN clinic. The receptionist directs her to the lab, and a blood test is performed to confirm the pregnancy. The patient then calls the OB clinic for her results. If the test is positive, she is instructed to call Sierra, the TRICARE contractor, and enroll in OB registration between the 8th and 10th weeks of her pregnancy. At OB registration, ten to 15 women sit in a conference room for three hours and fill out paperwork. Red Cross volunteers conduct this session, which was described by more than one patient as a "cattle call." A pregnant patient will not see a provider until her 12th week of pregnancy. The rationale for waiting the entire first trimester is that many women will not stay pregnant that long (Harrison, 1998). Patient comments on the NAS requests indicated that they did not feel comfortable waiting that long to see a health care provider about their pregnancy. According to the American Academy of Pediatrics and American College of Obstetricians and

Gynecologists, early diagnosis of pregnancy is an important factor in establishing a management plan for the individual (ACOG, 1992). Certain lab tests should be preformed "as early as possible" to identify potentially high-risk patients (ACOG, 1992).

Finally, because of infection control issues, children are not allowed in the OB/GYN clinic because it potentially endangers the unborn children's health. There is currently no convenient day care option for mothers who need to go to the OB/GYN clinic for a 20-minute appointment. This is an obvious inconvenience for patients with limited child care options.

Opportunities

Along with the challenges listed above, DeWitt has some tremendous opportunities to exploit. First, because 26 percent of the target market lives in the Woodbridge area, those patients may be better served by expanding OB/GYN services to the FHC of Woodbridge. Fourteen percent of the NASs issued in 1998 were to patients living in the Woodbridge area. While the family health center does not have any extra space for OB providers, the behavioral health building directly behind the clinic has a good deal of unused space.

While DeWitt’s physical facility is clearly a weakness, it also presents an opportunity for improvement. The Health Facilities Planning Agency (HFPA) developed three options for the future of DeWitt: (1) renovate the existing internal structure, (2) renovate the existing internal structure and build an addition onto the second floor, or (3) build a new hospital at a site in Northern Virginia, geographically separated from Fort Belvoir. Both the HFPA and DeWitt's leadership favor the "new hospital" option, but some short-term renovation is necessary because a new facility will take several years to complete. In the interim, DeWitt's third floor is an ideal location to create a "Women and Infant Center." Currently, Labor and Deliver and the Mother/Baby Unit share the floor with the Medical Subspecialty Clinic. With some renovation,

the wing can be turned into the OB/GYN clinic, and the bathroom problem in the Mother/Baby Unit fixed.

Along with some challenges, the implementation of TRICARE presents some exciting opportunities in terms of health promotion. The health promotion aspect of managed care is consistent with the philosophy of maintaining health and not simply treating disease. DeWitt provides some prenatal services through its wellness clinic, and some limited case management for high-risk patients, but there is ample room for improvement.

Instead of merely striving to meet patient expectations, DeWitt has the opportunity to manage patient expectations. For example, with the current staffing and physician call schedule, it appears virtually impossible to meet the patient's expectation of seeing only one provider throughout her pregnancy, labor, and delivery. Instead of simply refusing to meet that expectation and telling the patient "this is how we do it here," the DeWitt staff can explain to the patient that she can expect to see several providers in this group practice arrangement. This is advantageous to her because one of them will likely deliver her baby. The OB/GYN staff may be able to reorganize its 10 providers into two teams and empanel patients to those them.

Finally, while DeWitt's providers have excellent credentials, there were 12 patient comments on the outpatient questionnaire about rude staff members and "friendliness of the staff" was rated below the mean. Because health care is such a personal business, every patient is not going to be satisfied with how they are treated all the time, but there is always room for improvement. Once patients have an image of DeWitt as an unfriendly hospital, they tend to selectively perceive other data (Griffith, 1995). They will likely assume that because the providers are rude, the medical care is poor.

Threats

Clearly, DeWitt's hospital-based competition poses several threats, as discussed earlier. Bethesda's leadership is clearly ahead in the race to capture and retain part of DeWitt's market share. DeWitt's civilian competition offers more pleasing patient environments, and, in some cases, is more conveniently located.

The literature suggests that DeWitt will begin to see more non-hospital competition, as well. Several patients indicated their preference for home-based or birthing center deliveries on the "comment" section of the questionnaire. This segment of the population prefers delivering their babies in a less clinical setting, and DeWitt can expect demand for these services to increase.

In addition to increased competition, revised TRICARE/CHAMPUS regulations pose a threat to DeWitt, as well. TRICARE/CHAMPUS Policy Manual 6010.47-M states:

> Effective for maternity episodes wherein the first prenatal visit occurs on or after March 26, 1998, the requirement that a non-enrolled beneficiary must obtain an inpatient nonavailability statement (INAS) for inpatient hospital maternity care before TRICARE shares in any costs for related outpatient maternity care is eliminated (TRICARE/CHAMPUS, 1998).

The above policy suggests that a non-Prime beneficiary may obtain an INAS for inpatient care (her delivery) after she begins her outpatient, pre-natal care. This makes it possible for the patient to begin outpatient care with a civilian provider and ask the military treatment facility for an inpatient NAS at the time of delivery.

Limitations of the Study

There are several limitations to this market research, both in the secondary and primary data. First, although women have been delivering babies in hospitals for years, there is not a lot of research available on how to market to this important population. Because of the competitive nature of the health care market, studies are proprietary and not available to the public. TRICARE forces the military to market its services, so hopefully more market research will be conducted in the future.

Second, response rates for the outpatient questionnaire was low (24 percent), which is a major weakness of the mail survey (Cooper and Emory, 1995). The questionnaire included a self-addressed stamped envelope for responses, which usually increases the response rate (Cooper and Emory, 1995) and only two letters were returned "address unknown." However, people receive so much "junk mail" that it is disappointing, but not surprising, that 190 people failed to return a completed survey (Cooper and Emory, 1995).

Third, as with any survey instrument, there was the potential for bias. The beneficiaries who received outpatient questionnaires chose to return them. This self-selection leads to biased results because these patients may be the ones who feel very strongly about the subject of the questionnaire. While the outpatient surveys were anonymous, the inpatient questionnaires were not. Patients filled them in and turned them into the nurses, who were free to read them. This "Hawthorne effect" may have artificially inflated responses because patients did not want to upset the staff (Cooper and Emory, 1995).

Fourth, because so few of the people who responded to the outpatient questionnaire had been to the OB/GYN Clinic, it is difficult to assess outpatient strengths and weaknesses from a patient perspective. Even fewer patients had visited the Well Woman Clinic or the Family

Health Center. Future research efforts into this service line should include direct feedback from patients at the various clinics where services are provided to women.

Fifth, individual military treatment facilities no longer have visibility of non-Prime patients' TRICARE/CHAMPUS expenditures. Once the patient receives a NAS, the organization has no idea what the TRICARE contractor pays for her care. Thus, it is impossible to get an accurate idea of what services patients are using and how much they cost. This research would be more complete with that information.

Recommended Goal, Objectives, and Marketing Action Plans

DeWitt's goal is to be the Women and Infant services provider of choice for military health care beneficiaries in Northern Virginia. The following five objectives were formulated to support that goal:

1. Increase market share from 75 percent to 85 percent. DeWitt is staffed for 100 to 120 deliveries per month, and organizations are allowed one obstetrician per 20 monthly deliveries (Harrison, 1998). A 85 percent market share translated to approximately 100 deliveries per month.

2. Provide a more appealing environment for both outpatients and inpatients. Clearly, patients who responded to the outpatient questionnaire were concerned about DeWitt's physical facility.

3. Build on the success of the Well Woman clinic by expanding its services to capture more routine GYN care for DeWitt beneficiaries. The Well Woman clinic is one of DeWitt's most popular services. The only thing patients complained about in a 1998 survey was access to that service.

4. Enhance the continuity of care for OB patients through a more personalized introduction to the service. The timing of NAS requests indicate that many women requested them during the "lag time" between their positive pregnancy test and their OB registration appointment. This is a crucial period of time that presents tremendous marketing opportunities. The DeWitt staff needs to bring these patients in and form a relationship with them before they find someone else who will.

5. Improve the coordination among the various components of this service line through product line management. If someone were to look across the various services like patients do, he or she would be able to better coordinate the various components into an exciting product that patients appreciate.

Once the target market is selected and a broad strategy is established, the organization can specify the tactical components of the marketing plan (Berkowitz, 1996). This plan addresses actions to be taken regarding each aspect of the marketing mix: product (service), price, place, and promotion. Below are recommended actions to take within each of those elements.

<u>Service</u>

First, the service aspect of the OB/GYN clinic will be improved by creating two teams of providers and empanelling patients to one of those teams. Patients would then be told:

> "You are assigned to 'Stork Team #1' and you will be seen by all the providers on that team at least once during your pregnancy. Here's a list of all the providers on your team. Chances are very high that one of them will deliver your baby. However, because of our on-call schedule, we cannot guarantee that will happen, but we can guarantee that when you are ready to deliver your baby, highly qualified professionals will be here for you."

This will help to manage patient expectations and provide motivation for them to get to know a cadre of DeWitt providers, instead of simply being told, "I'm sorry, but we are too busy to allow you to see the same provider throughout your pregnancy."

Second, another way to reduce variation within these services is to actually create a "Women and Infant Services" product line. For a hospital, product-line development means rebundling already available services into packages patients can recognize (Gray, 1988). DeWitt does not currently practice product line management, but the literature shows that two of the most successful product lines are emergency care and obstetrics (Gray, 1988). Fairfax hospital, one of DeWitt's competitors, has a product line manager for its women and children's service line. The creation of a "Women and Infant" product line, complete with a manager who oversees the services, will improve the disconnect between the various components.

Third, patients need to receive services earlier in their pregnancies. One of the first disconnects patients feel is the time between their positive pregnancy test and their first appointment with a provider. Patients are not counseled at all until "OB Registration," and even then, the only staff members they interact with are Red Cross volunteers. There is no professional medical or nursing interaction. It takes more resources, in terms of staff and time, to provide one-on-one counseling to newly pregnant patients, and, sadly, some will not remain pregnant. However, to be the provider of choice for its beneficiaries, DeWitt must capture those patients right after they find out they're pregnant and provide them with educational materials, pre-natal vitamins, and an introduction to their services. A cursory look at the timing of NAS requests reveal that most patients submitted them after they found out they were pregnant and then were told that they would not see a provider until their 11^{th} or 12^{th} week of pregnancy. OB Registration should be provided to patients on an individual basis as soon as they are ready.

Fourth, health care services are inseparable from the individuals delivering them, and the quality of customer-service provider interaction should be high (Berkowitz, 1996). If DeWitt staff members are rude to patients, the patients will feel as if DeWitt cannot provide good medical care. "Bedside manners" and friendly ancillary staff are perhaps more essential within the Women and Infant service line than any other DeWitt product line because episodes of care last up to nine months. There is tremendous opportunity to either delight or infuriate patients at any step along that episode. To become the health care organization of choice for this target market, DeWitt's staff must commit themselves to intense customer service and "consideration of others" training. Attitude toward patients should be included on every job description, and employees who refuse to treat these patients with kindness and compassion should be replaced. DeWitt's patients deserve excellent service from excellent employees.

Finally, DeWitt's Women and Infant service line must be positioned correctly in the market. Product positioning involves how a product (or service) is perceived in the minds of consumers relative to defined attributes and competing products/services (Berkowitz, 1996). On a multidimensional scaling (MDS) map, DeWitt's Women and Infant service line provides a high range of services at a low price (Berkowitz, 1996). In order to increase market share, DeWitt should adopt a mass marketing strategy aimed at military families in Northern Virginia.

Price

One of the unique aspects of military health care is that patients perceive it as "free." Besides the small co-payments women will pay for their inpatient stay at DeWitt, there are virtually no out-of-pocket costs. This is a tremendous advantage that should be communicated to patients, but the organization needs to be careful, because people may associate "free" with "inferior service."

Another way patients pay for health care is by spending their time making appointments, travelling to the appointments, and waiting for providers. This is known as "time costs." Retired individuals arguably have more time to wait for providers than busy working families, so "space available care" may be a feasible option for them. However, this target market consists primarily of active duty beneficiaries and their spouses who do not have the time to spend on health services. Respondents identified wait times on the telephone as a problem in both the well-woman survey conducted prior to this research and the outpatient questionnaire. Additionally, wait times in the clinics were rated low relative to the other areas. Decreasing wait times through increased efficiency is a great way to gain a price advantage.

Place

DeWitt's location is one of its greatest strengths, particularly when analyzing the entire DeWitt Health Care System. A recommended way to improve patients' access to outpatient OB care is to expand services to the Family Health Center of Woodbridge. That area contains the greatest concentration of individuals in the target market. Of the 254 beneficiaries who requested nonavailability statements, 14 percent live in the Woodbridge area.

Another way to improve access to services is by expanding the well woman clinic to 40 hours per week. This clinic is very popular and provides pre-conception services to women who are thinking of becoming pregnant. This introduction to DeWitt's Women and Infant service line should be more accessible to patients so they become familiar with all DeWitt has to offer.

Perhaps the most urgent "place" action plan is improving the physical facility these services are provided in. Renovating the third floor of the hospital to accommodate the well woman/OB/GYN clinic and install bathrooms in the mother/baby unit will significantly improve this service line. Adding aesthetically pleasing décor to those areas, plus the Labor and Delivery

suites, will assist in attracting and retaining patients who are aware of what the competition offers.

Promotion

With any promotional strategy, the goal is to communicate to a market (Berkowitz, 1996). Four possible promotional strategies are advertising, personal selling, publicity, and sales promotion (Berkowitz, 1996). After improving the service and place aspect of its Women and Infant service line, DeWitt should concentrate on advertising and public relations.

Advertising is a major element of health care marketing. In 1993, the total marketing budget for all U.S. hospitals was $1.81 billion, of which advertising represented $768 million (Berkowitz, 1996). Advertising highlights the difference between competing services, and DeWitt can use it to differentiate its services from its competitors.

One element of advertising that the military health system has become quite familiar with is direct mail. Military treatment facilities use this medium to inform patients about the benefits of enrolling in TRICARE Prime. A benefit of direct mail is that the intended recipients are part of the target market -- DeWitt can readily identify female beneficiaries of childbearing age within its catchment area. To inform these potential patients about its improved services, the marketing staff should send them personalized invitations to the grand opening of DeWitt's Women and Infant Service Center on the hospital's third floor. This grand opening should consist of a tour of the facilities and a question/answer session with the staff. The literature supports the notion that women are educated health care consumers who are willing to "shop around" for the best services.

Fairfax Hospital offers a virtual tour of its women and children services on the Internet. With the click of a mouse, a potential patient can go from the reception area to an LDR room to a

post-partum room, stopping for refreshments along the way. DeWitt is in the process of developing a more interactive web site, and a virtual tour of the Women and Infant service center should be included.

Another advertising campaign should focus on DeWitt's price advantage, both in terms of monetary and time expenditures. The OB/GYN clinic makes its own appointments, and priority should be given to improving this process. An advertising campaign highlighting DeWitt's low-cost deliveries can then be directed at young families who have not enrolled in TRICARE Prime. Having a baby is expensive, but Prime enrollees are virtually guaranteed services within the military treatment facility. One patient believes that "80 percent of the dependents of military personnel view military hospitals with uncertainty and trepidation." An advertising campaign differentiating DeWitt on both price and accessibility may convince this population to give the system a second chance.

One thing is very clear: The military health system has disenfranchised some patients through poor services. This is not only true for Women and Infant services, but for primary and specialty care, emergency care, and hospitalization. Many women commented that having a baby is just too important to trust the military health system with.

To counter this belief, DeWitt's staff should embark on a public relations blitz throughout the community. Several forums exist to do this in, such as print media (military and civilian), a video for the local Ft. Belvoir cable station, briefings for units on post, display boards at Army Community Services, the Commissary, and the Post Exchange, and providing staff members at community events to answer questions.

Conclusion

In order to remain financially viable under EBC, DeWitt needs to maintain a strong TRICARE Prime population base, and convince these enrolled patients to choose its OB services. While the majority of women who requested NASs for OB care did so ostensibly because DeWitt is too far from the homes, the questionnaire responses indicated that distance was not the only reason. Outpatients rated atmosphere, friendliness of the staff, wait times, and ease of getting an appointment lower than the other areas surveyed on the questionnaire. Inpatients rated the facilities, the atmosphere, continuity of care, and willingness to recommend DeWitt to a friend below the mean.

Planning and marketing define the organization's basic response to its environment (Griffith, 1995). Providing a Women and Infant service line that meets patient expectation supports DeWitt's mission and vision. The literature suggests that women are key health care decision-makers for the entire family, but are particularly savvy when it comes to making decisions about childbirth.

To properly market this service line, DeWitt's staff must commit to improvements in all four "Ps" -- product, price, place, and promotion. Advertising alone will not capture a greater share of the market, but taking a systemic view of the entire patient encounter likely will.

To successfully implement the above action plans, DeWitt should view these services as one, long episode of care as seen from the patient's perspective. Improving their delivery is going to require an investment of human and monetary resources. Ten recommended marketing action plans, in order of importance, are as follows:

Table 9: Recommended marketing action plans

1. Create a "Women and Infant Services Center" on the hospital's third floor that is both functional and aesthetically pleasing to patients.
2. Appoint a product line manager to oversee the integration and marketing of Women and Infant services. This position can be an "additional duty" for a DeWitt staff member and can even be temporary. Good candidates include the Chief of OB/GYN, one of the head nurses, the Chief of Clinical Support, or the Director of Marketing.
3. Invest in a personalized "OB registration" process for newly pregnant patients.
4. Train every staff member involved in Women and Infant services on "consideration of others" and customer service. Incorporate these behaviors into job descriptions and enforce them.
5. Create two empanelment teams for OB patients, and manage patient expectations for continuity of care by encouraging them to see every provider on their team.
6. Offer outpatient OB services at the FHC of Woodbridge to accommodate that huge population of patients.
7. Advertise the above improvements to potential patients through direct mailings, brochures, and flyers inviting them to the grand opening of DeWitt's new center devoted to women and their infants.
8. Create additional access into this service line by expanding the well woman clinic to 40 hour per week.
9. Embark on a public relations campaign to alleviate suspicions that military health care is inferior to civilian care.
10. Create a virtual tour of DeWitt's Women and Infant Service Center on the Internet.

In this era of increased competition and changing patient expectations, DeWitt's staff should look to the future, as their predecessors did when they created the family health centers, and create a patient-oriented Women and Infant service line worth bragging about.

References

S. Allen (personal communication, August 27, 1998)

American Academy of Pediatrics and American College of Obstetricians and Gynecologists (ACOG). (1992). Guidelines for Perinatal Care (3rd ed.). Washington, D.C.: American College of Pediatrics and American College of Obstetricians and Gynecologists.

Appleby, C. (1997a). Marketing to Women: Clinics with a Feminine Touch. Hospitals & Health Networks, 71(19), 100.

Appleby, C. (1997b). Marketing: I'm Ready for my Close-Up. Hospitals and Health Networks, 71(7), 92.

Berkowitz, E. (1996). Essentials of Health Care Marketing. Gaithersburg, MD: Aspen Publishers, Inc.

The Coalition for Improving Maternity Services (CIMS) (1997). The Mother-Friendly Childbirth Initiative. Journal of Nurse-Midwifery, 42(1), 59-63.

Cooper, D. and Emory, C. (1995). Business Research Methods (5th ed.). Chicago: McGraw-Hill Companies, Inc.

Curtis, M., Riggs, J., and Blanco, J. (1998). Declines in Patient Volume: An Obstetrics and Gynecology Teaching Program's Response. American Journal of Perinatology, 15(3), 173-176.

Dearing, R., Gordon, H., Sohner, D., and Weidel, L. (1987). Marketing Women's Health Care. Rockville, MD: Aspen Publishers, Inc.

Department of the Army. (1988). Army Regulation 40-68, Quality Assurance Administration.

Department of Defense. (1998). TRICARE/HCAMPUS Policy Manual 6010.47-M.

DeWitt Army Community Hospital. (1998). U.S. Army Medical Activity, Fort Belvoir, VA, and the DeWitt Health Care System Command Briefing.

Donaldson, C., Hundley, V., and Mapp, T. (1998). Willingness to Pay: A Method for Measuring Preferences for Maternity Care? Birth, 25(1), 32-39.

Ernst, E. (1996). Midwifery, Birth Centers, and Health Care Reform. Journal of Obstetrical and Gynecological Neonatal Nursing, 25(5), 433-439.

Finkelstein, B., Harper, D., and Rosenthal, G. (1998). Does Length of Stay During Labor and Delivery Influence Patient Satisfaction? Results from a Regional Study. The American Journal of Managed Care, 4(12), 1701-1708.

Ginter, P., Swayne, L., and Duncan, W. (1998). Strategic Management of Health Care Organizations. Malden, MA: Blackwell Publishers, Inc.

Gray, R. (1988). Marketing for Success through Product-Line Development. Topics of Health Care Finance, 14(3), 76-83.

Griffith, J. (1995). The Well-Managed Health Care Organization (3rd ed.). Ann Arbor, MI: AUPHA Press/Health Administration Press.

M. Harrison (personal communication, January 19, 1999)

Health Care Liaison Office. (1998). Summary of Non-Availability Statements. Dewitt Army Community Hospital.

Inova Fairfax Hospital. (1999). [On-line]. Available: http://www.inova.com/fh/index.htm

Johns, L. (1994). Obstetrics-Gynecology as Primary Care: A Market Dilemma. Health Affairs, Spring (II) 1994, 194-199.

Koska, M. (1988). One-Stop LDRP units Redefine Obstetrics Care. Hospitals, 62(19), 60-61.

Managed Care Support Contract (MCSC) Request for Proposal (RFP). (1998). TRICARE Region 1, C-1-6.

Mander, R. (1997). Choosing the Choices in the U.S.A.: Examples in the Maternity Area. Journal of Advanced Nursing, 25, 1192-1197.

Mangelsdorff, A. (1994). Patient Attitudes and Utilization Patterns in Army Medical treatment Facilities. Military Medicine, 159(11), 686-690.

Mitchell, Mark. (1999). Research Design Explained. [On-line]. Available: http://spss.clarion.edu/rde3/c3/c3handout32.html

Mustelier, Raul. (1997). CHAMPUS Health Care Finder and Preferred Provider Program. Managed Care division, DeWitt Army Community Hospital.

Patient Liaison Office. (1998). Summary of Non-Availability Statements. DeWitt Army Community Hospital.

Phillips, C. (1998). Why Mother-Baby Care? Association of Womens Health, Obstetric and Neonatal Nursing, 2(1) 53-54.

K. Plante (personal communication, September 4, 1998)

Potomac Hospital. [On-line]. Available: http://www.pcweb.com/potomachospital/s_wome.html

Publication Manual of the American Psychological Association (4th ed.). (1996). Washington, D.C.: American Psychological Association.

Reid, A. (1996). Marketing Maternity Care: A Step-by-Step Guide. Midwives, 109(1298), 52-54.

Resource Management Division. (1999). Revised Financing Briefing. DeWitt Army Community Hospital.

Roark, A. (1997). Marketing: Applications in a Military Health Care Setting. Military Medicine, 162, 543-546.

Schmidt, M. and Gerlach, C. (1986). LDRP: Staffing a Single Care Maternity Unit. Nursing Management, 17(8), 36-40.

Simon, N., Heaps, K., and Chodroff, C. (1997). Improving the Process of Care and Outcomes in Obstetrics/Gynecology. Journal on Quality Improvement, 23(9), 485-497.

Steimer, Nancy J. (1998). Customer Satisfaction Survey, Well-Woman Clinic, DeWitt Health Care System.

Stone, P. and Walker, P. (1995). Cost-Effectiveness Analysis: Birth Center vs. Hospital Care. Nursing Economics, 13(5), 299-307.

Tobey + Davis; The Innova Group. (1998). Master Plan HPR & Work Session. DeWitt Army Community Hospital, Fort Belvoir, Virginia.

M. Whitcomb (personal communication, September 3, 1998).

Williams, L. and Cooper, M. (1995). A New paradigm for Postpartum Care. Journal of Gynecological and Neonatological Nursing, 25, 745-749.

Appendix A

DeWitt Army Community Hospital Women and Infant Services Questionnaire (Outpatient)

1. Have you ever been a patient at DeWitt's OB/GYN or Well Woman (WW) Clinics? **YES** **NO**

2. If "yes " which clinic? **OB/GYN** **WW** **Both**
   (If "no," please skip to question # 10)

For questions 3 - 8, please circle the most appropriate response using the following key:
5 = Strongly Agree 4 = Agree 3 = Neither Agree nor Disagree 2 = Disagree 1 = Strongly Disagree

3. The atmosphere (decor, etc.) of the clinic is very pleasing. **5 4 3 2 1**

4. The clinic staff is very friendly and made me feel comfortable. **5 4 3 2 1**

5. The clinic staff respected my privacy. **5 4 3 2 1**

6. My waiting time in the clinic was reasonable. **5 4 3 2 1**

7. It was easy to get an appointment at the clinic. **5 4 3 2 1**

8. The clinic is open during hours that are convenient for me. **5 4 3 2 1**

9. There were sufficient educational materials available at the clinic. **5 4 3 2 1**

10. I requested a non-availability statement to use another facility's OB/GYN service because (please circle all that apply):

Convenience Reputation Recommendation from others Have civilian physician that I trust

Its Atmosphere Other (please explain)

_____

11. My decision to request another facility for the birth of my child was based on (please circle all that apply):

Convenience Reputation Recommendation from others Its Atmosphere Other (please explain)

_____

Please provide any additional comments below:

_____

_____

_____

Thank you for your comments!

Appendix B
DeWitt Army Community Hospital Women and Infant Care Questionnaire (Inpatient)

We are working on improving our service and value your opinion. Please take a moment to answer the questions below. Thank you!

For the following questions, please circle the most appropriate response using the following key:
5 = Strongly Agree 4 = Agree 3 = Neither Agree nor Disagree 2 = Disagree 1 = Strongly Disagree

1. I am pleased with the medical care I received in the labor and delivery unit.	**5**	**4**	**3**	**2**	**1**
2. I am very pleased with the medical care I received in the mother/baby unit.	**5**	**4**	**3**	**2**	**1**
3. The hospital staff is friendly and made me, and my family, feel comfortable.	**5**	**4**	**3**	**2**	**1**
4. The hospital staff respected my privacy.	**5**	**4**	**3**	**2**	**1**
5. The facilities (my room, the bathroom) adequately met my needs.	**5**	**4**	**3**	**2**	**1**
6. The atmosphere (decor, etc.) of the clinic was pleasing.	**5**	**4**	**3**	**2**	**1**
7. I was cared for by the same physician or team of physicians throughout my pregnancy.	**5**	**4**	**3**	**2**	**1**
8. I would definitely recommend DeWitt to a friend who is expecting a baby.	**5**	**4**	**3**	**2**	**1**

For the following questions, please circle the most appropriate response:

9. The reason I chose to deliver my baby at DeWitt is:

Its Location Its Facilities The Staff I felt I had no choice Other

10. If I had to make a decision right now on where I would deliver my next child, I would choose:

DeWitt Army Community Hosp Natl Naval Medical Center (Bethesda) Local Civilian Hosp

11. The following are suggestions on how to improve DeWitt's women and infant care:

_____

_____

_____

_____

Thank you for your comments!